

A Product Packaging and Displaying Device

Background of the Invention

Generally, sockets are displayed with cardboards and
5 styrofoam for sale. Another way is to place it inside a toolbox
and sell it as a set. Traditionally packages and ways of display
have high chances of getting the products stolen. Referring to
Fig. 1, a prior art comprises a hanging body 71, one end having
a protruded locking part 72 which a socket can sleeve on. This
10 can only display one socket at a time and the socket is
completely exposed outside. This does not make the product
attractive, and if the socket falls accidentally, it will cause
damages.

15 Referring to Fig. 2, another prior art which is a hanging
device for storing and displaying a socket. It mainly comprises
a hanging part 73, its board surface having a plurality of holes.
A hanging hole is disposed on top of the plurality of holes. The
back of the board having protruded edges, a socket base 74 is
20 hollowed, a protruded edge is disposed on it, a convex dot is
disposed at its both sides on the top part, the top part can be
inserted into one side of the socket, the bottom end is inserted
into the plurality of holes. The bottom end having an opening,
and a protruded edge of upside-down hook shape is disposed by
25 the opening, the protruded edge can hook on the plurality of
holes. A positioning piece 75 having one end in screw head
shape, the other end can goes through the socket, the same end

having an opening, a protruded edge of upside-down hook shape is disposed at the same end for hooking on the bottom edge of the socket base. The screw head's height is shorter than the socket. Accordingly, the positioning piece 75 goes through the socket and is fixed by the screw head, have to cut loose the
5 upside-down hook liked protruded edge of the positioning piece 75 from the hanging part 73, in order to take out the socket. The plurality of holes of the hanging part 73 can hold several sockets.

10 Although the above prior art can hold several sockets, too many elements make the costs very high, besides, the fixing and placing of sockets is too complicated and time-wasting. When displaying the socket, the socket base 74 has to be placed in the hole of the hanging part 73, after the socket is placed in the
15 socket base 74, then positioned it by the positioning piece 75. If want to take off the socket, need to cut loose the upside-down hook shaped protruded edge at one end of the positioning piece 75. Thus it is not convenient to place and take off the socket. It also causes damages if it falls down on the ground.

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Referring to Fig. 3, another prior art of a socket hanging frame. It mainly comprises a rod liked hanging frame 81 and an U-shaped holding frame 91. The rod liked hanging frame 81 having a plurality of combining elements 82 vertically disposed
25 on the frame 81. The combining element 82 comprises a pair of corresponding elastic pieces, the first elastic piece protrudes outward as a protruded piece 821. A elastic body 822 is disposed

between the two elastic pieces. The hanging frame 81 having a ear part 83 at each end, the holding frame 91 is fixed on the hanging frame 81 to form a space for placing a socket. The holding frame 91 having a supporting post 92 at each end
5 protruded toward the hanging frame 81. The supporting post 92 having an U-shaped supporting frame 911 at its top end. The two ends of the supporting frame 911 can go through the ear part 83 of the hanging frame 81. The supporting frame 91 is fixed on the hanging frame 81. On either longitudinal sides of the bottom of
10 the holding frame 91 having a wave-shaped protection board 93 disposed toward the hanging frame 81. Each curve part of the protection board 93 is corresponding to the combining element 82 of the hanging frame 81. A positioning board 94 for positioning the socket, is vertically disposed in the middle of
15 each protection board 93 on the bottom of the holding frame 91. A groove 941 between each positioning board 94 and each protection board 93 is for placing the circumference edge of the socket.

20 The above 3 prior arts can display sockets, but all have complicated structures which are high in costs. The effect and quality of display functions they provide are not ideal. The drawbacks are:

1. Complicated structures and high costs. Even though prior
25 art 3 only comprises a hanging frame and a holding frame, all the elements including the protruded piece, the elastic body, the protection board, the positioning board and the groove for

placing the socket, and all the elements including the ear part, the supporting post and the supporting frame for assembling, are indeed complicated, it is not convenient to assemble and also of high costs.

5 2. Not convenient to assemble. When assembling the hanging frame and the holding frame together, have to combine the U-shaped holding frame at one end of the holding frame, to the ear part of the hanging frame, then

using a string 84 to goes through the holes of the ear part and
10 the supporting frame. It is ineffective and not stable at all.

3. Due to the limitation of the combining elements and the elements forming the groove, the prior art 3 can only hold generally sockets. If the sockets have long and short lengths, the hanging frame cannot hold them at the same time. Besides, the
15 holding frame and the hanging frame are fixed by a string which makes it easier to be stolen. If sockets fall down, it will cause damages.

Summary of the Invention

20 The present invention of a product packaging and displaying device which can easily and conveniently display and packaging sockets, can also prevent sockets from falling off and causes damages.

25 The present invention will become more fully understood by reference to the following detailed description thereof when read in conjunction with the attached drawings.

Brief Description of the Drawings

Fig. 1 is a flat view of a socket display frame of a first prior art;

Fig. 2 is an exploded assembly view of a socket display frame of
5 a second prior art;

Fig. 3 is an exploded assembly view of a socket display frame of
a third prior art;

Fig. 4 is a perspective view of a product packaging and
displaying device of the present invention;

10 Fig. 5 is an exploded assembly view of a product packaging and
displaying device of the present invention;

Fig. 6 is a flat view of a product packaging and displaying
device of the present invention;

Fig. 7 is a perspective view of a second embodiment of the
15 present invention;

Fig. 8 is an exploded assembly view of the second embodiment
of the present invention;

Fig. 9 is a perspective view of a third embodiment of the present
invention;

20 Fig. 10 is an exploded assembly view of the third embodiment of
the present invention;

Fig. 11 is a view of another structural application of a sleeving
and covering part of a covering body of the second embodiment
of the present invention.

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Detailed Description of the Preferred Embodiment

Referring to Figs. 4 to 10, the present invention of a product

packaging and displaying device is a display device 1, which mainly comprises a holding body 10 and a covering body 20, for packaging and placing display product 30 such as sockets and socket rods.

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The holding body 10 with its one side having a protruded board part with holes disposed on it, and form a hanging part 11, another side having a positioning part 12 for one end of the display product 30 to sleeve on, and a connecting part 13 for the covering body 20 to connect onto. A hollow display part 14 is protruded outward and disposed between the positioning part 12 and the hanging part 11. The two connecting parts 13 are disposed near both ends, while the positioning parts 12 are evenly disposed between the two connecting parts 13. The positioning parts are in neighboring to each other and each of them is formed by two parallel pieces. The width of the two parallel pieces equals to the hole diameter of the display product 30. Each parallel piece having a locking device 121 disposed on the outer side, for pressing against the display product 30. Each of the two connecting parts 13 having two positioning holes 131 at suitable locations, for sleeving the covering body 20. The display part 14 is a protruded part for sticking trademarks or product instructions, its width is just slightly wider than the maximum width of the display product 30. So that the display product 30 can fit onto the display part 14 and within the outer edges of a sleeving and covering part 21.

The covering body 20 is in an upside-down U-shape, which is assembled to one side of the holding body 10 with which the side is for sleeving the display product 30. The sleeving and covering parts 21 are evenly disposed and connected to the holding body 10 in corresponding to the positioning parts 12. Structure and shape of each sleeving and covering part 21 can be changed according to the display product 30. The present invention referring to the first, second third embodiments, the sleeving and covering part 21 is a sleeve-ring structure having a hole, for sleeving the display product 30. The covering body 20 having a hollow connecting board 22 protruded outward and disposed on each end. The connecting board 22 having a locking piece 221 to lock with the positioning hole 131, for fixing the connecting part 13 of the holding body 10.

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Accordingly, insert the hole of display product 30 into the positioning part 14, the covering body 20 is fixed on one side of the holding body 10 by the locking mechanism of the connecting board 22 and the connecting part 13, while each sleeving and covering part 21 is sleeved on the outer surface of the display product 30. So that the display product 30 is placed inside the display device 1 conveniently and stably. The upside-down hook-liked structure of the locking piece 221 can further provide even more stable assembly of the holding body 10 and the covering body 20, which cannot be damaged at a short time to steal the display product 30.

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Besides, the covering body 20 can be in different structures for fitting various display product 30 to achieve excellent packaging function. The display part 14 and the sleeving and covering part 21 having widths bigger than that of the display product 30, as referring to Fig. 3, can prevent the display product 30 for being damaged when the display device 1 falls off. Thus the present invention is ideal for displaying and packaging display product 30.

The height and structure of the sleeving and packaging part 21 of the covering body 20 can be changed according to the structure, shape and length of the display product 30. Referring to Figs. 4 and 5, the first embodiment of the present invention, the covering body 20 is in sectional structure in corresponding to the display product 30 of a socket turning head and a universal socket. Referring to Figs. 7 and 8, the second embodiment of the present invention, the covering part 20 is in a structure with both sides shorter than the middle, in corresponding to the display product 30 of a big and a small universal sockets and a socket turning head. Referring to Figs. 9 and 10, the covering body 20 is in a flat shape, in corresponding to the display product 30 of a long socket rod.

Referring to Fig. 11, if the display product 30 having one end as a hexagonal socket hole, another end as a rectangular socket, then the sleeving and covering body 21 can be formed as the structure of the positioning part 12 of the holding body 10, or

as other protruded structure for the display product 30 to sleeve
on, or the positioning part 12 of the holding part 10 can be
formed as a hollow sleeve-ring structure as the sleeving and
covering part 21, for sleeving a tool with both ends in protruded
5 rod structures.

Note that the specification relating to the above embodiment
should be construed as exemplary rather than as limitative of the
present invention, with many variations and modifications being
10 readily attainable by a person of average skill in the art without
departing from the spirit or scope thereof as defined by the
appended claims and their legal equivalents.

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